

Dr. Neil Aspinwall – Chancellor
SOWELA Technical Community College
Lake Charles, Louisiana

Southwest Louisiana has been blessed with an abundance of expansion activities related to the petro-chemical, Liquefied Natural Gas (LNG), and Gas to Liquids (GTL) industry. In fact, there is currently \$85 + billion in planned industrial expansions directly related to the LNG/GTL energy sector and approximately \$30+ billion in construction is already underway. These massive and historical expansions in the petro-chemical industry create the need for highly skilled workers for the oil and gas industry. SOWELA Technical Community College, one of the thirteen institutions that comprise the Louisiana Community and Technical College System (LCTCS) has been given the opportunity and responsibility to provide the training programs and services needed to produce the workforce necessary to help construct these massive industrial expansions and operate the new petro-chemical plants once they begin production.

According to the Louisiana Workforce Commission, the annual completers of workforce programs necessary to fill the occupations of highest need for the energy sector expansion in the region are:

- Construction crafts field = 9360
- Industrial Production = 4955
- Welding = 4810

Since 2012, SOWELA has begun to design, create, implement, and/or expand training programs to help meet the demands of these oil and gas industrial expansions. Programs focusing on skilled crafts such as pipefitting, Millwright, welding, insulators, scaffolding, concrete forming, machining, sheet metal, electrician, lab analysis, and non-destructive testing have been added to instructional program options at the College. Enrollment in high demand programs directly related to the oil and gas industry such as Process Technology and Industrial Instrumentation have literally doubled in the past couple of years.

According to the Energy Sector Jobs to 2030: A Global Analysis published by the Institute for Sustainable Futures in 2009, the 2020 global energy sector is expected to employ an estimated 10.5 million workers. By 2030 global sector energy jobs are expected to grow by an additional 800,000 workers totaling an estimated 11.3 million employees.

The energy sector, comprised of small, medium and large businesses, will experience significant and steady demand for skilled workers over the next 15 years on a regional, state, national, and global level. Therefore, SOWELA Technical Community College whose mission is to provide the skills and training needed to prepare the workforce to help grow and sustain the regional, state, and national economy must be prepared with the programs, services, and financial resources necessary to help produce this massive workforce.

Meeting the workforce demands of the expanding oil and gas industry is a very daunting task which is going to require strategic efforts on the part of many collaborative partners. SOWELA has developed training partnerships with the Plumbers and Steamfitters Union, the Heat and Frost Insulators Union, the Carpenter's Union, the Millwright Union, the secondary school systems in the five-parish region, and with the Associated Builders and Contractors. Forming collaborative partnerships makes the task of identifying and training potential oil and gas workers much easier.

In order to get the students into the workforce quicker and satisfy the hiring demands of industry, many higher educational institutions are beginning to offer programs in shorter condensed formats. SOWELA has seen great success with this shortened instructional delivery format. In fact, SOWELA created a compressed Process Technology program to provide the opportunity for students to earn an Associate of Applied Science degree in just 16 weeks. The first FastTrack P-Tech cohort contained 18 students – all of which had already earned advanced degrees - and were placed into the workforce within 6 months after completion. This substantiates the fact that these energy sector jobs are highly sought after positions that have and will continue to attract individuals to the region for better employment opportunities. The oil and gas industries who are actively recruiting for these skilled craft positions are multi-national companies who provide great salary and benefits packages.

As the workforce needs for the oil and gas industry becomes more acute, the petro-chemical industry has requested and SOWELA has implemented various short-term training programs, many less than 6-months in length and ranging from 80 to 900 contact hours. These programs have been developed in the craft areas such as Machining, Millwright, Electrical, Structural Welding, Pipe Welding, Scaffolding, Cement Forming, Insulators, and HVAC. As an example, an individual who enrolls in and successfully completes the Structural Welding program can immediately be hired at an hourly wage of at least \$26. So a time commitment of six months and a program cost of approximately \$2200 can provide the means for an individual to earn a middle class wage with great benefits which helps strengthen the local, state, and national economies.

However, this method of placing students into the workforce quicker through condensed instructional delivery formats does have a down side. Although shorter condensed programs provide skill training in critical competency areas and reduce the number of contact hours or seat time a student needs to spend in the classroom or lab; it is this reduction in contact hours that prevents the programs from being eligible for federal financial aid. According to the U.S. Department of Education guidelines, these types of short-term condensed workforce development programs are not eligible for federal financial aid because they are not at least 600 clock hours and 15 weeks in length.

But despite the ease at which these training programs can be created and offered, and the demand from industry, the program costs still present an obstacle that prevents many of our citizens from taking advantage of the training needed to prepare them for the job opportunities available through the petro-chemical industry expansions.

SOWELA, as well as other community colleges whose primary mission is workforce development, struggles to find options to help students cover the costs of enrolling in and completing these condensed industry specific training programs and services.

Since 84% of community college students' work and 60% work more than 20 hours per week, our students cannot afford to quit their jobs and take advantage of skills training programs in which no financial aid is available.

Fortunately, various private industries such as CB&I, Praxair, Bechtel, and Capital One have stepped forward to provide scholarships for students seeking entry into these programs. Furthermore, one of our strongest partners is the Regional Workforce Investment Board who helps certify some of our training programs to help ensure the programs are eligible for federal, state, and local dollars through the Workforce Innovation and Opportunity Act (WIOA).

Although greatly appreciated and highly sought after, these business and industry scholarships are not the long term solution to sustaining the training programs necessary for building the oil and gas industry workforce. A more permanent and guaranteed funding source needs to be created so that the oil and gas industry and the energy sector overall can continue to be competitive and help the national economy grow and improve. Legislation on the federal level could help provide the funding solution needed and I hope this committee will investigate all options for federal funding assistance.

SOWELA and the Louisiana Community and Technical College System have a golden opportunity to shape the future of Louisiana and the nation as a whole by producing the workforce needed to ensure that America continues to produce the energy necessary to fuel an economy that will provide financial and economic stability, vitality, and prosperity for generations to come.